

9. Noah

Program Name: Noah.java

Input File: noah.dat

Noah is a columnist for his school's newspaper and he's writing an article on the most driven vehicles among the student body. He has already collected the data in regard to the make, model, and year of each student's individual vehicle. The problem is his data is all over the place and needs to be organized so that he can analyze it. Can you write a program that will sort all the data alphabetically by make, model, then year as well as display the breakdown of each vehicle by make, model and year?

Input: Input starts with a line containing an integer N ($1 \leq N \leq 40$), the number of students who drive a car at Noah's school. The following N lines will contain the make, model, year for each vehicle Noah collected data for. The make, model, year will be separated by a comma.

Output: The output for this program is broken into four portions:

- 1) Data Sorted
- 2) Make Breakdown
- 3) Model Breakdown
- 4) Year Breakdown

The Data Sorted portion is displayed alphabetically by make, with the tiebreaker being model. If there is then a tie between both make and model, the final tiebreaker is year which is displayed from lowest to highest.

For the make, model, and year breakdowns, the output is the number of occurrences of each. It is important to note that each breakdown is sorted. Make and model are sorted alphabetically, and year is sorted numerically from lowest to highest.

Sample Input:

```
16
Chevy,Cruze,2019
Chevy,Silverado,2006
Ford,F150,2010
Dodge,Durango,2020
Dodge,Ram1500,2008
Chevy,Silverado,2006
Ford,F150,2015
Chevy,Cruze,2009
Ford,Explorer,2006
Dodge,Ram1500,2018
Dodge,Ram1500,2019
Ford,F150,2015
Ford,Mustang,2017
Ford,Edge,2012
Dodge,Charger,2017
Dodge,Challenger,2012
(sample output on next page)
```

Sample Output: (Noah)

```
---Data Sorted---  
Chevy Cruze 2009  
Chevy Cruze 2019  
Chevy Silverado 2006  
Chevy Silverado 2006  
Dodge Challenger 2012  
Dodge Charger 2017  
Dodge Durango 2020  
Dodge Ram1500 2008  
Dodge Ram1500 2018  
Dodge Ram1500 2019  
Ford Edge 2012  
Ford Explorer 2006  
Ford F150 2010  
Ford F150 2015  
Ford F150 2015  
Ford Mustang 2017
```

```
---Make Breakdown---  
Chevy: 4  
Dodge: 6  
Ford: 6
```

```
---Model Breakdown---  
Challenger: 1  
Charger: 1  
Cruze: 2  
Durango: 1  
Edge: 1  
Explorer: 1  
F150: 3  
Mustang: 1  
Ram1500: 3  
Silverado: 2
```

```
---Year Breakdown---  
2006: 3  
2008: 1  
2009: 1  
2010: 1  
2012: 2  
2015: 2  
2017: 2  
2018: 1  
2019: 2  
2020: 1
```